

W·I·N·G·S·P·A·N

VOLUME 9 NO. 1

MARCH 2000

MESSAGE FROM THE PRESIDENT

Dear Members,

I would like to open this message by campaigning for the upcoming RRF presidential election. I wish not to campaign for myself; my motivation is to promote interest and participation in the election. My sincere hope is that RRF members will **ELECT** a new President this summer. I say new President because I will not seek another term this year. I emphasize **ELECT** because one of the goals of my second term is to ensure that RRF has a competitive presidential election in 2000, the first in four years. I ran unopposed in the last two presidential elections and was disappointed because the voting members did not have a choice.

What would happen if RRF elected no President? That could happen if no one steps forward and runs for the office. The office of President is one of the more demanding positions in our organization, but it is also one of the more rewarding. After two years at the helm, I feel the rewards are worth the time and labor demanded. I am enjoying my tenure as President, but at the end of this term it will be time to step down: four years is long enough to accomplish my goals, without becoming entrenched. RRF has many members who could do a superb job; this spring, Pat Hall and I will be approaching them to throw their hats into the ring. We want to have at least two candidates on the ballot. Mike Collopy and others labored diligently to ensure free elections for RRF President and Vice-President. I hope we reward their efforts with a full slate of candidates. Also, I urge all of you to vote. I am afraid that voter turnout in the past has been low.

As I wrote this message, I began to wonder if apathy is setting in on RRF. Are our members losing interest and enthusiasm? I do not think, as an organization, we are apathetic, but I believe enthusiasm varies, depending on the global region. I saw impressive enthusiasm and a desire to expand RRF in Eurasia when I attended the Eurasian RRF Conference in the Czech Republic last September. This ebullience reminded me of RRF in the U.S. in the early 1970s. To cultivate this energy and address regional needs, RRF Board members from Eurasia approached me about formally organizing RRF in Eurasia in terms of conferences, conservation, membership, and information exchange. In terms of conferences, the desire is to hold annual meetings in Eurasia. This is demonstrated by the RRF conference in the Czech Republic in 1999; RRF cosponsoring, with the World Working Group for Birds of Prey, the Raptors 2000 conference in Israel this April; and informal offers to host meetings in Spain, Poland, and Greece. To address the needs in Eurasia, I have formed an ad hoc committee of six Board members and officers (three from Eurasia and three from North America) co-chaired by Robert Kenward and Brian Millsap. The committee will report to the membership at the RRF annual conference in November in Arkansas.

I see RRF changing in the new millennium. The energy and alacrity seen in Eurasia are also growing in other regions of the globe. Where RRF goes in the new century, depends on the interest, motivation, and involvement of its members.

Mike



RAPTOR RESEARCH FOUNDATION 1999 ANNUAL MEETING

La Paz, Baja California Sur, México, November 3-7

by David Andersen

The 1999 Annual Meeting of The Raptor Research Foundation, Inc. was held from 3-7 November 1999 at the Hotel Araiza Inn Palmira Las Californias Convention Center in La Paz, Baja California Sur, México. Ricardo Rodriguez Estrella and his local committee put together a well run and interesting meeting in the beautiful setting of La Paz on the Sea of Cortez. Meeting sponsors included CIBNOR, S.C., Hotel Araiza Inn Palmira, Tecate, Coca-Cola, Microsystemas Californianos, S.A. de C.V., Aeromexico, Papeleria y Copias de B.C.S., Telmex, and Agua Monarka. The approximately 170 meeting attendees were treated to Baja California's finest hospitality, with ample opportunity for scientific exchange and social interaction. The scientific program put together by Jeff Smith consisted of 12 general paper sessions and a poster session. A symposium and workshop on the North American Raptor Management Strategy (organized by Jim Bednarz and Jeff Smith) was held in conjunction with the meeting, and a symposium on Golden Eagles (organized by Mike McGrady and Eduardo Inigo-Elias) preceded the meeting. Approximately 80 papers were delivered as part of the meeting, and 26 posters were presented during an evening poster session. Organized social events included nightly refreshments and a Mexican banquet that featured folk dancers and a mariachi band. Unorganized social events included dinner of freshly caught yellowfin tuna and mahi mahi (caught by Pat Kennedy, Matt Solensky, and yours truly) prepared by the kitchen at the Hotel Araiza Inn Palmira. Area attractions included desert birding (including searching for 2 endemics) and the spectacular Sea of Cortez. The Local Committee organized a number of exciting marine and terrestrial field trips, and day trips and local attractions in and around La Paz were easy to arrange and visit. The 1999 meeting will be remembered as being well organized, a good venue for scientific and professional interchange, and a wonderfully hosted gathering in beautiful southern Baja California. The Local (Ricardo Rodriguez Estrella, Elena Enriquez Silva, Patricia Patron Cota, Claudia Perez Estrada, Edmond Montañó, Horacio Sanchez Mendoza, Maria Louisa de la Cruz Aguero, Rafael Sanchez Godinez, and Larry Miller) and Scientific (Jeff Smith) Committees deserve congratulations and thanks for planning and conducting such an enjoyable and interesting meeting.

THE RAPTOR RESEARCH FOUNDATION, INC.

(FOUNDED 1966)

OFFICERS

PRESIDENT: Michael N. Kochert

SECRETARY: Patricia A. Hall

PRESIDENT-ELECT: Michael N. Kochert

TREASURER: Jim Fitzpatrick

VICE-PRESIDENT: Keith L. Bildstein

BOARD OF DIRECTORS

INTERNATIONAL DIRECTOR #1: Massimo Pandolfi

DIRECTOR AT LARGE #1: Jemima Parry-Jones

INTERNATIONAL DIRECTOR #2: Reuven Yosef

DIRECTOR AT LARGE #2: Robert E. Kenward

INTERNATIONAL DIRECTOR #3: Beatriz Arroyo

DIRECTOR AT LARGE #3: Lloyd F. Kiff

NORTH AMERICAN DIRECTOR #1: Brian A. Millsap

DIRECTOR AT LARGE #4: Miguel Ferrer

NORTH AMERICAN DIRECTOR #2: Petra Bohall Wood

DIRECTOR AT LARGE #5: John A. Smallwood

NORTH AMERICAN DIRECTOR #3: Robert N. Lehman

DIRECTOR AT LARGE #6: James C. Bednarz

Wingspan is distributed twice a year to all RRF members. It is also available to non-members for a subscription rate of \$10 per year. *The Journal of Raptor Research* (ISSN 0892-1016) is published quarterly and available to individuals for \$33 per year (\$18 per year for students) and to libraries and institutions for \$50 per year from: Ornithological Societies of North America, P.O. Box 1897, Lawrence, KS 66044 USA. Add \$5 for destinations outside of the continental United States. Individual and student memberships renewed before November 15 are \$30 and \$15, respectively. Persons interested in predatory birds are invited to join The Raptor Research Foundation, Inc. Send requests for information concerning membership, subscriptions, special publications, or change of address to: Ornithological Societies of North America, P.O. Box 1897, Lawrence, KS 66044 USA.

RRF ELECTION RESULTS, 1999

A total of 260 ballots was cast, representing 26.7% of the voting membership. Results are as follows:

International Director #1: Eduardo E. Inigo-Elias (Fundacion ARA, Apartado Postal 2275, Suc. J, Antiguo Camino al Diente 3333, C.P. 64988 Monterrey, Nuevo Leon, Mexico; *phone*: 528-317-8588; *fax*: 528-317-8502; *e-mail*: einigofunara@compuserve.com)

North American Director #1: Phillip J. Detrich (USDI/U.S. Fish and Wildlife Service, P.O. Box 1006, Yreka, CA 96097; *phone*: 530-842-4471; *fax*: 530-842-4473; *e-mail*: phillip_detrich@fws.gov)

Director At Large #3: Michael W. Collopy (USGS/Biological Resources Division, Forest and Rangeland Ecosystem Science Center, 3200 Jefferson Way SW, Corvallis, OR 97331; *phone*: 541-750-7307; *fax*: 541-758-7761; *e-mail*: collopym@fsl.orst.edu)

Director At Large #6: Brian A. Millsap (Florida Fish and Wildlife Conservation Commission, 620 Meridian Street S, Tallahassee, FL 32399-1600; *phone*: 850-488-3831; *fax*: 850-488-6988; *e-mail*: millsab@gfc.state.fl.us)

**RAPTOR RESEARCH FOUNDATION, INC.
RESOLUTION**

WHEREAS, the mission of the Raptor Research Foundation, Inc., is to stimulate the dissemination of information concerning raptorial birds among interested persons worldwide and to promote a better public understanding and appreciation of the value of birds of prey,

AND WHEREAS, the Annual Meeting is one of the most important forums for accomplishing that mission,

THEREFORE BE IT RESOLVED, the Board, Officers, and membership of the Raptor Research Foundation, Inc. commend Ricardo Rodriguez Estrella and members of the local committee, CIBNOR, Jeff Smith, chair of the scientific program and co-organizer, with Jim Bednarz, of the Symposium on the North American Raptor Monitoring Strategy, and Mike McGrady and Eduardo Inigo-Elias, co-organizers of the Golden Eagle Symposium, for planning, organizing, and conducting a stimulating, well organized 1999 annual meeting in La Paz.

BE IT FURTHER RESOLVED, that the Board, Officers, and membership applaud the local committee for the superb meeting accommodations and high level of efficiency in conducting the meeting. The same said Board, Officers, and membership thank the local committee for its gracious hospitality, for hosting enjoyable social events, and for providing an outstanding forum for dissemination of information concerning raptorial birds.

3rd EURASIAN CONFERENCE OF THE RAPTOR RESEARCH FOUNDATION
Mikulov, Southern Moravia, The Czech Republic, 21-26 September 1999

by Petr Voríšek and Keith L. Bildstein

For the third time in six years the Raptor Research Foundation held a successful Eurasian RRF meeting in the Old World. This time the meeting was held in the particularly picturesque Czech town of Mikulov, in southern Moravia, 2½ hours by car southeast of Prague, and 1½ hours by car north of Vienna. Previous Eurasian meetings have occurred in Canterbury, England, in 1994 and in Urbino, Italy, in 1996. The meeting, jointly organized by the Czech Society for Ornithology's Working Group on Protection and Research of Birds of Prey and Owls, and the Raptor Research Foundation, proved to be an especially enjoyable and rewarding event. The conference received support from the Trebon Basin and Palava Protected Landscape Area and Biosphere Reserve Administrations, as well as the Institute of Vertebrate Biology of the Czech Academy of Sciences in Brno, and the Regional Tourist Information Centre, in Mikulov. The participation of students from Russia was partly supported by a local sponsor. Local chair Petr Voríšek, assisted by an enthusiastic team of Czech students, scientists, conservationists, and tourism specialists, ensured that a good time was had by all of the 98 participants from 18 countries attending the event.

The scientific program, which opened on the morning of 22 September and concluded on the afternoon of 26 September at the Hotel "Rohatý Krokodýl" (Horny Crocodile), included a total of 37 oral and 37 poster presentations anchored by three outstanding keynote presentations: "The post-DDT recovery of the Peregrine Falcon (*Falco peregrinus*)," by Lloyd Kiff; "Thirty years of raptor conservation in the Snake River Birds of Prey Area," by Michael Kochert; and "Philopatry in Sparrowhawks (*Accipiter nisus*): dispersal, breeding-site fidelity, and winter movements of individuals living in Prague," by Lubomir Peske. In addition to contributed sessions on populations (L. Kiff, chair), conservation and biology of migrants (K. L. Bildstein, chair), conservation (M. Kochert, chair), general biology and raptor techniques (R. Yosef and P. Voríšek, chairs), breeding biology (R. Kenward and B. Arroyo, chairs), Vladimir Galushin convened a highly successful session on raptors in agricultural landscapes.

A record 14 oral and 15 poster papers presented at the meeting were made by students, including one by David Lacina (Czech Republic) entitled "Ectoparasite *Carnus hemapterus* influences the mass growth rate of nestling European Kestrels (*Falco tinnunculus*)," which won the best student paper award (a telescope donated by the Czech company, Meopta), and papers by T. J. García and B. E. Arroyo (Spain) entitled "Intra- and interspecific agonistic behaviour in sympatric Hen and Montagu's harriers (*Circus cyaneus*, *C. pygargus*)," M. S. Romanov (Russia) entitled "Distribution of nests and territories of large birds in accordance with spatial structure of vegetation," and J. Vanková and P. Voríšek (Czech Republic) entitled "Brood-size manipulation in the European Kestrel," all of which were awarded honorable mentions (annual memberships in the Raptor Research Foundation).

Although authors of papers presented at the meeting were not required to do so, it is anticipated that many of the papers presented in Mikulov will be submitted for publication in the CSO's Working Group on Birds of Prey and Owls journal, *Buteo* or in RRF's *The Journal of Raptor Research*. In the interim, additional copies of the abstracts of papers presented at the meeting are available from Petr Voríšek (e-mail: cso.vorisek@bbs.infima.cz) at a cost of CZK 100 (\$US 3) plus postage costs.

Social events and excursions associated with the scientific meeting included a sumptuous "ice-breaking" session on the evening of the 21st, a banquet in a wine cellar near Znojmo on the evening of the 23rd that included a wine tasting and the playing and singing of southern Moravian folk songs, burcak (a misty,

slightly alcoholic, Moravian new wine) "lubricated" poster sessions on the evenings of the 22nd and 24th, and a field excursion to the Palava Hills Biosphere Reserve on the 24th that included great views of many Common Buzzards (*Buteo buteo*), Ospreys (*Pandion haliaetus*), Marsh Harriers (*Circus aeruginosus*), Sparrowhawks (*Accipiter nisus*), Honey Buzzards (*Pernis apivorus*), Northern Hobbies (*Falco subbuteo*), and Peregrine Falcons (*Falco peregrinus*).

Although a venue for the next Eurasian meeting has yet to be decided, several RRF board members and officers meeting unofficially at Mikulov suggested that southern Spain, perhaps Seville, would make a great venue for the 4th Eurasian Conference of RRF.

1999 RRF AWARD RECIPIENTS

by Petra Bohall Wood, Chair, Awards Committee

Dean Amadon Grant (Selection Committee: Clayton M. White, Chair; Reviewers: Richard Baumann, Hal Black) Recipient: **Laura Plice**, San Jose State University, for her research on winter distribution of American Kestrels.

Stephen R. Tully Memorial Grant (Selection Committee: Kimberly Titus, Chair; Robert K. Murphy; Robert N. Rosenfield) Recipients: \$500 to **Roberval Alameida** and **Eduardo Baldioceda**, National University of Costa Rica, "Strategies for Conserving Rain Forest Raptors in the Buffer Zones of Costa Rica National Parks."

Leslie Brown Memorial Grant (Selection Committee: Jeff Lincer, Chair; Dean Amadon; Rich Howard; Alan Kemp) Recipient: \$1000 to **Andrew Burton**, University of Colima, "Eagles of Tanzania's Northern Rift Valley."

William C. Andersen Student Paper Award (Selection Committee: Laurie Goodrich, John Smallwood, Petra Bohall Wood, Co-chairs; Reviewers: Jim Bednarz, Jim Belthoff, Pat Hall, Steve Hoffman, Ernesto Ruelas Inzunza, Carol McIntyre, Mark Miller, Bob Rosenfield, Petra Bohall Wood) Recipients: Oral Presentation First Place: \$100 to **Chad Olson**, University of Montana, "Hawk Shooting, Not Just a Problem of the Past." Oral Presentation Runners-up: **David Arsenault**, University of Nevada, "Social System and Local Aggregation of Flammulated Owls," and **Caroline Deppe**, University of Montana, "Do Eyespots on Northern Pygmy-owls Influence Avian Mobbing Behavior?" Poster Presentation First Place: \$100 to **Brian Smith**, Boise State University, "Ectoparasites on Burrowing Owls: Potential Effects on Nest-site Reuse and Growth, Body Condition, and Survival of Juveniles." Poster Presentation Runner-up: **Norma Gonzalez Sanchez**, CIBNOR, "Interactions Between Two Raptors Associated with Human Activity in Baja, California."

James R. Koplín Travel Award (Selection Committee: Patricia A. Hall, Chair; Robert N. Lehman; Joan L. Morrison) Recipients: **Caroline E. Deppe**, University of Montana, "Do Eyespots on Northern Pygmy-owls Influence Avian Mobbing Behavior?" and **Brian W. Smith**, Boise State University, "Ectoparasites on Burrowing Owls, Potential Effects on Nest-site Reuse and Growth, Body Condition, and Survival of Juveniles."

Fran and Frederick Hamerstrom Award (Selection Committee: David E. Andersen, Chair; Clint W. Boal; Richard L. Knight; Karen Steenhof) The Fran and Frederick Hamerstrom Award was not presented in 1999; no new nominations were received.

RRF CONSERVATION ACTIVITIES

by Jim Bednarz, Chair, Conservation Committee

Proposed Delisting of the Bald Eagle

The U.S. Fish and Wildlife Service (FWS) issued a proposal to delist the Bald Eagle on 6 July 1999 (Federal Register 64[128]:36454-36464). The Raptor Research Foundation, Inc. (RRF) had previously put together an ad hoc committee consisting of Bob Anthony, Pete Nye, Karen Steenhof, Brian Walton, and myself to address this proposal. We went to work on the proposal immediately, but the time line for comments was very short, especially considering the amount of data to sift through and the fact there were substantive data and issues arguing both for and against delisting. Final comments were due to FWS on 5 October, although additional deadlines for requesting public meetings and for receipt of comments on monitoring were 20 August and 7 September 1999, respectively. The RRF Bald Eagle Delisting Committee managed somehow to meet all these deadlines in some fashion and maintained communication with the RRF Board throughout the process.

Some raptor biologists and ornithologists have expressed to me that delisting of the Bald Eagle is a "no-brainer" given relatively huge increases of numbers. However, contrary to what a casual observer might assess based on greater number of eagles being reported in recent years, the RRF Bald Eagle Delisting Committee uncovered several issues that made a scientifically sound decision to delist or to retain eagles on the list an extremely close call. To come to a resolution, the committee reviewed the various delisting criteria proposed in each region, examined the numeric data reported on eagles, sent a questionnaire to each state conservation agency and solicited input on the delisting decision, reviewed considerable literature, consulted with a variety of biologists and others not on the committee, participated in two public hearings, and held four teleconferences. The RRF Bald Eagle Delisting Committee completed a draft letter of recommendations, which might best be described as a compromise verdict, and circulated this draft to the RRF Board on 1 October 1999. The Board provided considerable input on the letter, but overall felt that they did not have adequate time to digest and evaluate the recommendations in the short time available before they were due to FWS. Therefore, the Board voted to submit a revised form of the recommendation letter as a RRF Committee Report on 5 October 1999, but the document was not adopted as official policy of RRF.

A copy of the RRF Bald Eagle Delisting Committee letter may be found at the RRF web site, and a brief summary of the content of the recommendations to the FWS follows:

- 1) The committee found that the proposal to delist Bald Eagles was fundamentally deficient in its assessment of the current importance, quantity, and security of habitat for eagles. The committee felt that although there are some data, mostly anecdotal or unpublished, suggesting that eagles can habituate to some levels of human development, essentially all peer-reviewed, published scientific data indicate that eagle populations have been and will continue to be impacted adversely by habitat alteration. As all protection of eagle habitat would vanish under the current delisting proposal, the committee recommended that delisting should not occur unless some form of modest habitat protection regulations are implemented.
- 2) The committee also found that the proposed delisting did not include a suitable monitoring plan. Specifically, the current plan calls for 5 years of monitoring and relies on state conservation agencies to continue their existing monitoring efforts during this period. The Committee felt that the current monitoring program was not statistically sound in that it was not coordinated and standardized and, in fact, several states either have stopped monitoring eagles or plan to stop as soon as eagles are delisted. We suggested that FWS take a lead role in working with key states in coordinating and standardizing Bald Eagle monitoring and

upgrading sampling approaches so that they are statistically defensible. The RRF committee also recommended that the monitoring program should be longer than the minimum of 5 years required by the Endangered Species Act, ideally approaching the length of one eagle generation. Other recommendations included monitoring of selected winter concentration areas, adding some form of habitat monitoring, and incorporating a statistically-valid contaminant assessment.

3) The committee determined that the stability of the Southwestern eagle population (AZ, NM, and Mexico) was questionable at best. As of 1998, 40 occupied breeding areas were reported, and productivity was lower in this region (estimated at 0.62 young per occupied breeding area) than in any other recovery region (generally >1.0 /breeding area). Also, the committee found no definitive evidence indicating that the Southwestern population interacts genetically with adjacent populations. Thus, the Bald Eagle Delisting Committee recommended that the Southwestern population not be delisted until a thorough status review, including a population viability analysis, is completed for this possibly distinct population.

4) The committee also pointed out that over 58 bald eagles have recently died from Avian Brain Lesion Syndrome (ABLS) in the southeastern United States. Currently, the cause of this disease is unknown and, thus, it could pose a threat to eagles in at least two recovery regions if it reaches epidemic status and no treatment or management options are available. The committee recommended that FWS coordinate and seek funding to support research into the cause and management of this disease, at least until it can be demonstrated that the disease cannot have widespread population effects.

5) The RRF committee pointed out that although population goals in terms of numbers of nesting areas have been met in most recovery regions, the delisting goal to provide some form of habitat protection explicitly stated in at least 3 regional recovery plans has not been addressed in any form. Also, numeric goals in terms of numbers of pairs or productivity have not been met in the Southwestern and Southeastern regions.

6) The RRF Bald Eagle Delisting Committee concluded by withholding support for delisting at this time. However, the committee supported delisting if two conditions could be met: 1) establishment of some form of habitat protection for essential eagle habitats, and 2) implementation of a revised monitoring plan that corrects current deficiencies. The committee made several specific recommendations on how the above conditions may be met.

The Process Continues

The RRF Bald Eagle Delisting Committee has continued with its analysis of the proposed delisting plan as offered by the FWS and is currently developing a manuscript that further supports and justifies the findings of the RRF committee. Our plan is to submit this manuscript for a thorough review by the RRF Board and to a refereed journal for publication, which will make the RRF contribution to the delisting process available to the public. Some of the recommendations as stated above may be modified as the analysis and review process continues.

During the course of RRF's evaluation of the proposed delisting of the Bald Eagle, we received requests for information or consultation by at least 10 scientific and conservation organizations. We believe that aspects of our assessment of the delisting proposal were incorporated into many comments provided to FWS by these organizations. Although the final rule probably will not be published until sometime this summer, we feel that we have influenced the process in such a way that the final decision to delist the Bald Eagle will incorporate at least some of our recommendations and that this regulation will likely have a much stronger scientific basis than the original FWS proposal.

Other Conservation Actions

RRF has drafted a resolution on the excessive harvest of Saker Falcons in several central Asian countries (p. 9). The resolution requests that all countries concerned join the Convention on Trade in Endangered Species (CITES), implement effective controls of the harvest, monitor populations, and conserve Saker Falcon habitats and populations. This resolution was refined at the 1999 RRF Meeting in La Paz, Mexico and unanimously passed by the RRF membership. This resolution has been sent to the World Wildlife Fund, International Union for the Conservation of Nature and Natural Resources, Birdlife International, and the International Association of Falconry. A special thanks goes to Mike McGrady, Robert Kenward, David Ellis, Steve Knick, Doug Grier, and Jim Bednarz for their considerable work on this resolution. Recently, the sub-committee on resolutions also researched and developed a draft resolution on Steller's Eagle and lead poisoning (p.8, below).

At RRF's request, The Wildlife Society has officially become a joint sponsor of the Northern Goshawk Technical Committee. The primary charges of this committee include: determine if there is evidence of a population trend in Northern Goshawks west of the 100th meridian, determine if there is evidence supporting the hypothesis that goshawks are dependent on large tracts of mature and old-growth forest, and identify the types of information currently lacking and necessary to assess the population status of goshawks. As *Wingspan* goes to press, Nova Silvy, President of The Wildlife Society, is in the process of appointing 3-4 additional members to serve on this committee with the five original members representing RRF.

RRF has formed an ad hoc committee to evaluate the proposed management plans for the take of wild Peregrine Falcons. The proposed management plans will be issued in draft form for comments sometime this year. This RRF committee will be chaired by Joan Morrison; current members include Brian Millsap and Robert Kenward. Anyone interested in sharing comments or data concerning the Peregrine Falcon management plans should contact Joan.

UPCOMING VOTE: DRAFT STELLER'S SEA EAGLE RESOLUTION

by Mike McGrady, Resolutions Sub-committee

Several RRF members and raptor workers from Japan and Russia have developed a draft resolution concerning potential lead poisoning threats to Steller's Sea Eagles (*Haliaeetus pelagicus*) in a portion of their wintering ground in Hokkaido, Japan. A draft of this resolution will be presented to the RRF membership at the 2000 annual meeting in Jonesboro, Arkansas for approval. As this issue of *Wingspan* is going to press, the RRF Board is making final adjustments to this draft resolution, and is seeking membership input prior to the vote. The resolution outlines the problem of lead poisoning of eagles from bullet fragments in deer carcasses not retrieved by hunters. Because the Japanese government has recognized the problem and has undertaken to provide legislation to possibly reduce the use of lead bullets, the resolution supports this action, but urges the government to support further research and to consider the potential problem of lead poisoning from lead shot (a problem for *Haliaeetus* eagles elsewhere in the world). The scope of the resolution is limited because the problem is complicated, concerning (among other things) changing economic conditions, apparent declines in fish availability, and increases in deer populations. The full text of the draft resolution will be posted on the RRF web page (<http://biology.boisestate.edu/raptor>). **Please review this draft resolution and assist RRF with international conservation issues by participating in the resolution process.** The RRF board would like to thank Matsuyuki Ueta, Keisuke Saito, Vladimir Masterov, Irina Utekhina, Eugene Potopov, Alexander Ladyguine, Dave Garcelon, and Mike McGrady for their time and effort in researching and drafting this resolution.

**RAPTOR RESEARCH FOUNDATION, INC.
RESOLUTION**

CONSERVATION AND HARVEST OF SAKER FALCONS

6 November 1999

WHEREAS, the Raptor Research Foundation, Inc. (RRF) is the world's largest organization for research and conservation of birds of prey, and

WHEREAS, RRF has adopted a position that wild raptors may be harvested for falconry provided that populations are large and stable or, if small, following evaluation on a biological basis, and

WHEREAS, excessive harvest of Saker Falcons has severely depleted breeding populations in parts of Kazakhstan, there are reports that the same has happened in Kyrgyzstan and Uzbekistan, and harvests are growing in Mongolia, and

WHEREAS, records of legally and illegally taken falcons show that the majority are destined for the Kingdom of Saudi Arabia and other states around the Arabian Gulf,

THEREFORE, BE IT RESOLVED, that RRF requests all signatories to the Convention on Trade in Endangered Species (CITES) to encourage all Central Asian countries to join CITES, and also

REQUESTS the U.S. State Department to seek assurances from the governments of Kazakhstan, Kyrgyzstan, Mongolia, Uzbekistan, Pakistan, China, Saudi Arabia and other Gulf States that specific steps will be taken to:

- Implement effective controls on harvest of Saker Falcons immediately to maintain existing populations;
- Improve monitoring of Saker Falcon stocks, and where needed manage them, to ensure that future harvests are sustainable;
- Conserve Saker habitats and minimize other threats to their populations, including but not limited to intensive use of rodenticides that cause secondary poisoning;
- Prevent deliberate release of hybrids or falcons of uncertain origin.

NORTH AMERICAN BANDING COUNCIL UPDATE

by Pete Bloom

The North American Banding Council, whose purpose is "Promoting Sound and Ethical Banding Principles and Techniques," held its annual meeting at The National Audubon Society's Research Ranch at Elgin, Arizona from 27-30 January, 2000. The meeting was attended by myself and alternate representative Buzz Hull. The principal purpose was to discuss the results of experimental passerine bander and trainer certification programs held at Reno, Nevada and Ottumwa, Iowa in 1999. The first attempts at creating and taking both written and field exams were successful, and much was learned from the process that can be applied to the next group of people seeking certification.

We discussed the status of various manuals including hummingbirds, raptors, passerines and near passerines, student, and trainer. All are near completion and should be finished this year. The latest draft of the Raptor Banding Manual is near completion and will be back in the publication committee's hands this spring. Should you desire more information on the NABC's activities, please go to www.nmnh.si.edu/birdnet/nabc.

MUSEUM OUTREACH EXHIBIT BRINGS THE RED-TAILED HAWK WITHIN REACH

by Linda Coldwell

The Red-tailed Hawk is a common sight across most of the state of Oklahoma. The familiar bird of prey is often seen perched atop fence posts and telephone poles or soaring over fields, woods, or parks. Despite its familiarity, however, most Oklahoma high school students have never had the opportunity to experience a Red-tailed Hawk up-close, or to learn much about its habitat or behavior. To solve this problem, the Sam Noble Oklahoma Museum of Natural History has created a traveling exhibit to bring these fascinating birds of prey within students' reach.

"The World of the Red-Tailed Hawk" is a self-contained outreach exhibit which centers around a display of an active Red-tailed mounted adult hawks nestlings, prey objects, remains and pellets and teeth. A collection materials, including specimens, skeletons included in the display. provides photos and catching prey and of the young birds series of interpretive, students and teachers the classroom. The chance to make scientific discoveries and draw conclusions about a variety of subjects on their own.



The exhibit is part of a larger project called "BIOTRACKS," a series of educational outreach programs designed and developed by the Sam Noble Oklahoma Museum of Natural History to help students use scientific skills and seek explanations for biological questions. The BIOTRACKS exhibits are based on curatorial research and feature objects from the museum's extensive collections. The project was funded by a grant from the Howard Hughes Medical Institute. The BIOTRACKS project targets students in rural and inner-city schools where scientific academic resources are often limited. "The World of the Red-tailed Hawk" has been the most popular of the program's four exhibits.

"Too often, curiosity, along with interest and creativity, are stifled in traditional classroom science situations," said museum associate director Peter Tirrell. "This occurs, in part, because students have little or no access to objects from the natural world. 'The World of the Red-tailed Hawk' and other BIOTRACKS exhibits solve this problem by placing real objects from the museum collection in the hands of students and their teachers."

The program received the 1998 Award for Excellence in the education/outreach category from the Oklahoma Museums Association. To date the four BIOTRACKS exhibits have traveled to more than 100 sites across the state and have been visited by more than 700,000 students and teachers. The exhibits have also traveled to museums and schools as far away as Montana.

BIRDS OF PREY GIVEN PROMINENCE AT WILDLIFE AND ZOO PATHOLOGY WORKSHOP

by John E. Cooper

The First European Wildlife and Zoo Pathology Workshop was held from 26-28 May, 1999 at the Institute for Zoo Biology and Wildlife Research (IZW) in Berlin, jointly hosted by the IZW and the Durrell Wildlife Conservation Trust (Jersey Zoo). Additional financial support was provided by Greendale Laboratories, Ltd. (UK), DPC Bierman GmbH, and Chassot.

The half-day sessions covered a range of topics relating to the health and diseases of European wildlife. Additional subjects ranging from case reports and an update on zoo legislation by Margaret Cooper to a discussion of avian lung anatomy by Professor Peer Zwart were conducted in open forums. A session on birds of prey was led by Professor John Cooper from Jersey Zoo and Dr. Oliver Krone from IZW. It covered the examination of birds of prey and the collection and submission of samples for pathological, toxicological, and other investigations. Formal lectures were followed by practical sessions in which participants working individually or in small groups were able to carry out *post-mortem* examination of dead buzzards and examine samples under the microscope. Current literature was on display as was information about relevant societies, raptor and rehabilitation centres, captive-breeding programmes, and forthcoming meetings.

The special feature of this workshop was the opportunity for participation in "hands-on" necropsy sessions. The excellent facilities at the IZW allowed the attendees (zoo and wildlife pathologists, biologists, and veterinarians) to review gross and microscopic lesions and diseases discussed in seminar sessions. Tips useful for field necropsy work were demonstrated and practised. Participants learned in different sessions how to age an ibex or chamois by its horn characteristics, were encouraged to check the preen glands of all raptors at necropsy, and were admonished always to make bone marrow and tissue touch (impression smears) slides during necropsy for quick and inexpensive cytology.

The faculty and staff of the IZW and Durrell Wildlife Conservation Trust are to be complimented for hosting an excellent three days. Special thanks are due to the organisers: Dr. Kai Frölich, Dr. Chris Dutton, and Professor John E. Cooper. At the close of the meeting, plans were being made for the Second European Wildlife and Zoo Pathology Workshop in 2000. Further information about the workshops may be obtained from Prof. John E. Cooper, Jersey Wildlife Preservation Trust, Trinity, Jersey JE3 5BP, Channel Islands, UK.

A GRAND OPENING !!!

by Walter C. Crawford, Jr.

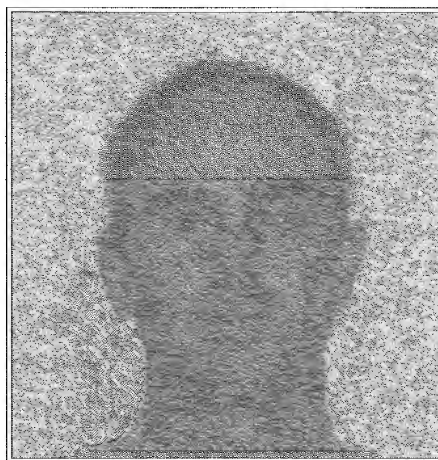
The World Bird Sanctuary will open the first five phases of its new World Environmental Education Center on May 13, 2000. This new, state-of-the-art facility, located on 130 acres in West St. Louis County, Missouri, will focus on education but will also have large captive breeding and rehabilitation facilities. The opening of the new education center will now allow visitor access to the site even though some construction still needs to be completed. Buildings that have been completed are the large raptor propagation building, the homing pigeon loft, the Thick-billed Parrot breeding facility, the eagle/condor breeding facility, one of the staff homes, and the education building. Under construction are a number of exhibit cages, another pigeon loft, a propagation facility for non-raptor species, a new education training center building for the center's education birds, shelters for outdoor education programs, and rehabilitation mews for injured raptors. In addition, construction of state-of-the-art water and sewage treatment facilities on site ensures the

environmental soundness of the center. Hiking, biking, and equestrian trails that have been constructed throughout the site will allow a variety of people to utilize the site under controlled situations. A wide range of educational programs will be available to increase the sanctuary's educational outreach. Using its current, small, outdated facility, the sanctuary reached over 630,000 individuals in educational programs in 1999; the potential exists to increase this as the new center comes on line. The World Bird Sanctuary is a non-profit organization under the direction of Walter C. Crawford, Jr. For more information, call 636-938-6193.

1999 LESLIE BROWN MEMORIAL GRANT

by Jeff Lincer

The 1999 Leslie Brown Memorial grant has been awarded to Dr. Andrew Burton of the Universidad de Colima, Mexico, for field research into the ecology of eagles inhabiting Tanzania's Northern Rift Valley. The study area chosen by Dr. Burton is particularly pertinent to the interests of the late Dr. Leslie Brown since it was here at Lake Natron in 1954 that Dr. Brown discovered the breeding site of the Lesser Flamingo (*Phoeniconaias minor*), and almost died when he got stuck in the soft mud of the extensive soda flats when trying to reach the breeding colony. His description of that episode makes for fascinating reading and points to the remote and harsh nature of the Lake Natron environment. Dr. Brown considered the flamingo to be the complete antithesis of eagles, and it is of great interest that he also devoted a great deal of energy and time to the study of these birds. Dr. Burton, whose previous research involved studying resource partitioning between the Australian Brown Goshawk (*Accipiter fasciatus*) and the Grey Goshawk (*Accipiter novaehollandiae*), aims to examine the ecology of the eagle community in the environs of Lake Natron with the objective of increasing awareness of the area as a priority site for conservation. Dr. Burton's current research is on neotropical eagles in south-eastern Mexico.



WINGSPAN CONTRIBUTIONS

The Raptor Research Foundation, Inc. wishes to thank the following people who contributed material to this issue of *Wingspan*: David Andersen, David Barber, Jim Bednarz, Jason Bennett, Keith Bildstein, Pete Bloom, Tom Bosakowski, Ann Christensen, John Churchill, Linda Coldwell, John E. Cooper, Gordon Court, Walter Crawford, Chris Eastham, Roy Faircloth, Jim Fitzpatrick, Pam Freeman, Fred Gehlbach, James Grier, Pat Hall, Richard Harness, Ohad Hatzofe, Eduardo Inigo-Elias, Robert Kenward, Mike Kochert, Jeff Lincer, Edy MacDonald, Carl Marti, Mike McGrady, Stan Moore, Robert Risebrough, Jevgeni Shergalin, Mike Shipman, Benigno Varillas, Petr Voříšek, Petra Bohall Wood, and World Working Group on Birds of Prey and Owls.

Wingspan welcomes contributions from RRF members and others interested in raptor biology and management. Articles and announcements should be sent, faxed, or e-mailed to the editor: Leonard Young, 1640 Oriole Lane NW, Olympia, WA 98502-4342 USA (phone/fax: 360-943-7394, e-mail: wingspan@msn.com). The deadline for the next issue is August 7, 2000.

ANNOUNCEMENTS

UPCOMING MEETINGS

2000

July 25-27

SECOND SYMPOSIUM ON ASIAN RAPTOR RESEARCH AND CONSERVATION

Bandung, West Java, Indonesia

Contact: Javan Hawk-eagle Working Group, c/o Yayasan Pribumi Alam Lestari (YPAL), Jalan Paledang 20, Cibeureum, Bandung, Indonesia, phone/fax: 62-22-6070139, e-mail: ypal@bdg.centrin.net.id or arrc@egroups.com.

September 13-17

SEA EAGLE 2000:

INTERNATIONAL WHITE-TAILED SEA EAGLE CONFERENCE

Björkö, Sweden

Contact: Björn Helander, phone: 46-8-5195-4109, fax: 46-8-5195-4256, e-mail: bjorn.helander@nrm.se.

November 8-11

RAPTOR RESEARCH FOUNDATION

Jonesboro, Arkansas

Contact: Jim Bednarz, Department of Biological Sciences, Arkansas State University, State University, AR 72467, phone: 870-972-3082, fax: 870-972-2638, e-mail: jbednarz@navajo.astate.edu, web: <http://www.clt.astate.edu/bednarz/rrf>.

PUBLICATIONS AVAILABLE

"BIRDS AND POWER LINES" features chapters on *Estimating bird mortality caused by collision and electrocution with power lines* (K. Bevenger), *Collision of birds with overhead transmission lines in Spain* (J. A. Alonso and J. C. Alonso), *Swans and electrical wires, mainly in Sweden* (S. Mathiasson), *Mitigation of bird collisions with transmission lines through groundwire marking* (J. A. Alonso and J. C.

Alonso), *Suggested practices for raptor protection on power lines: the American story* (R. N. Lehman, A. R. Ansell, M. G. Garrett, A. D. Miller, and R. R. Olendorff), *Avian electrocution on power poles: European experiences* (G. F. E. Janss and M. Ferrer), *Osprey population response to availability of artificial nesting sites at Laguna Ojo de Liebre and Guerrero Negro on Baja California Peninsula* (A. Castellanos, A. Ortega-Rubio and C. Arguelles-Mendez), *Breeding of birds on transmission lines in Spain: evaluation, prevention and mitigation* (V. Navazo and A. Lazo), and *Birds and utility structures: developments in southern Africa* (C. S. van Rooyen and J. A. Ledger). The book may be ordered from: **Servicios Informativos Ambientales/Quercus, Camino de Hormigueras 122 B, 5ª P-1, 28031 Madrid, Spain**, e-mail: revista@quercus.es (English version = \$US 31 + \$US 4 s/h, or 29 Euros + 6 Euros s/h; Spanish version = \$US 28 + \$US 4 s/h, or 26 Euros + 6 Euros s/h). English or Spanish abstracts of each chapter may be viewed on-line at: <http://www.quercus.es/tendidos>.

"BIRDS OF PREY: ANATOMY, RADIOLOGY AND CLINICAL CONDITIONS OF THE PELVIC LIMB" (ISBN 0-9636996-9-5) by Nigel Harcourt-Brown, BVSc, DipECAMS, FRCVS is a comprehensive, CD-ROM format reference based on dissection of seven Peregrine Falcons (*Falco peregrinus*) and seven Goshawks (*Accipiter gentilis*). A topographical illustration of every region of pelvic limb anatomy was produced for each species. Detailed descriptions of the bones, joints, muscles, and vascular and nervous systems are provided, and a table of origins, insertions and innervations of all the pelvic limb muscles is included. The clinical disease section is divided into orthopedic disease and integumentary disease. Other diseases, such as displacement of the main flexor tendons, are described in more detail, with the aid of better anatomical understanding. Special advantages of CD-ROM format include zoom capabilities for enhanced

viewing; easy search functions; print capabilities; 39 extraordinarily explicit anatomy illustrations with arteries, veins and nerves identified by color; 25 illustrations to identify and clarify images on accompanying radiographs; and 190 full-color photographs depicting clinical, orthopedic, and pathologic conditions. For more information or to place an order (\$US 85 + s/h), contact: **Roy Faircloth, Zoological Education Network, P.O. Box 541749, Lake Worth, FL 33454-1749, phone: 800-946-4782 or 561-641-6745, fax: 561-641-0234, e-mail: RFaircloth@ZEN-Inc.com.**

"CONSERVATION OF THE BEARDED VULTURE (*GYPAETUS BARBATUS*) IN GREECE" (ISBN 960-367-006-5) This 75-page volume contains summaries of papers presented at the Bearded Vulture Workshop held on 21-24 November 1998 in Iraklio, Crete: *Ecology and Conservation of Vultures: the Peculiarity the Bearded Vulture* (D. C. Houston), *Ecology and Conservation of the Bearded Vulture: the Case of the Spanish and French Pyrenees* (R. Heredia and M. Razin), *Habitat Selection of the Bearded Vulture in the Spanish Pyrenees and Management Implications* (J. A. Donazar), *Genetic Variability in the Bearded Vulture Populations (Pyrenees, Alps) and Applications in its Conservation and Population Management* (J. J. Negro), *The Bearded Vulture Reintroduction Project in the Alps* (K. Hofbauer-Hofer), *The Status of the Bearded Vulture in the Balkans* (B. Grubac), *LIFE Project on the Conservation of the Bearded Vulture in Greece* (S. Xirouchakis, C. Papazoglou, and M. Probonas), *LIFE Project on the Conservation of the Bearded Vulture in Corsica* (J.-F. Seguin), *LIFE Project on the Conservation of the Bearded Vulture in the French Alps* (C. Coton), *LIFE Project on the Conservation of the Bearded Vulture in the Spanish Pyrenees (Aragon)* (R. J. Antor), *New Data on Status of the Bearded Vulture in Caucasia* (A. Abuladze and J. Shergalin), and *Report on the Bearded Vulture Workshop* (M. Mylonas, S. Xirouchakis, and M. Probonas). Those interested in obtaining a copy of these proceedings may contact the Editor-in-Chief: **Michalis Probonas, Natural History Museum of Crete, University of Crete, P.O. Box 2208, GR71409 Iraklio, Crete, Greece, phone: 30-81-324366, fax: 30-81-393279, e-**

mail: mprobonas@nhmc.uoc.gr.

"INTERNATIONAL HAWKWATCHER" (ISSN 1527-0319) is a new journal containing original, previously unpublished articles and notes about birds of prey (migration, behavior, ecology, nesting, feeding, etc.). The editor is especially interested in receiving concisely written, short notes about odd or unusual raptor activities or behavior that deserve to be published but might not be accepted by major ornithological journals. There will be at least one full-length paper per issue. To help pay printing costs, advertising will be accepted. *International Hawkwatcher* will be issued once or twice a year; the first issue was published in January 2000. Those interested in subscribing (\$US 12.50 per issue postpaid within the USA, plus \$US 7.50 s/h for non-US addresses), contributing an article or note, or arranging advertising should contact the editor: **Donald S. Heintzelman, 629 Green Street, Allentown, PA 18102 USA, e-mail: dsh@early.com.**

"KHISHCHNYYE PTITSY I SOVY PERMSKOGO PRIKAM'YA [BIRDS OF PREY AND OWLS OF THE PERM CIS-KAMA RIVER AREA]" (ISBN 5-7430-0369-6) Written by Dr. A. I. Shepel and published in 1992 by Irkutsk University Press, this 296-page paperback book is not widely known outside of the former Soviet Union. Drawing upon 15 years of field investigations and synthesis (1975-89), the book--which is wholly in Russian--presents data on the distribution, absolute and relative numbers, phenology, nesting, breeding, nesting and hunting behavior, and feeding of 30 species of diurnal and nocturnal raptors of the Perm Cis-Kama River area (Central Ural Mountains). The book includes 158 tables and an extensive bibliography including 231 sources in Slavic languages. It may be purchased for \$US 8 (including s/h) from the author: **Dr. A. I. Shepel, Communisticheskaj Str. 119-54, 614068 Perm, Russia, e-mail: shai53@mail.ru.**

RAPTOR ELECTROCUTION VIDEO The Raptor Protection Video Group recently completed a 30-minute video on raptor

electrocutions. The video discusses how electrocutions occur and common problems and solutions. The video can be obtained from: **Richard E. Harness, EDM International, Inc., 4001 Automation Way, Fort Collins, CO 80525-3479, phone: 970-204-4001, fax: 970-204-4007, e-mail: rharness@edmlink.com.**

"RAPTORS AT RISK: PROCEEDINGS OF 5TH WORLD CONFERENCE ON BIRDS OF PREY AND OWLS" (ISBN 0-88839-478-0) Edited by R. D. Chancellor and B.-U. Meyburg, this 895-page volume features 90 original papers accompanied by diagrams, maps, line drawings and photographs. The proceedings may be purchased directly from: **World Working Group on Birds of Prey and Owls, P.O. Box 52, Towcester NN12 7ZW, England (£ 30, \$US 48.50, DM 90, FF 280).**

RUSSIAN RAPTOR LITERATURE "Zoolit" provides a variety of bibliographic services related to raptors in the countries that comprised the former Soviet Union: translations from Russian to English, bibliographies (references from 1656 to present), literature reviews, and copies of articles from regional journals. Recent translations have emphasized the Asian part of the Russian Federation, Kazakhstan, and other central-Asian countries. For more information, contact: **Dr. J. Shergalin, Soprase pst. 175-58, Talinn 13413, Estonia, phone: 3725-090684, fax: 3726-599351, e-mail: zoolit@hotmail.com.**

"THE NORTHERN GOSHAWK: ECOLOGY, BEHAVIOR, AND MANAGEMENT IN NORTH AMERICA" (ISBN 0-88839-454-3) by Thomas Bosakowski is now available. This work contains 6 chapters, 61 color photos and figures, 3 tables, 3 appendices, and 177 references (8.5x11", SC, 80 pp.). Copies can be ordered for \$35.00+s/h from: **Hancock House Publishers, 1431 Harrison Avenue, Blaine, WA 98230-5005, phone: 800-938-1114, e-mail: sales@hancockhouse.com, web: www.hancockhouse.com.**

"VETERINARY ASPECTS OF CAPTIVE BIRDS OF PREY" (ISBN 0-904602-04-4) by

John E. Cooper, FRCVS is now out of print and no longer supplied by Standfast Press. A small number of copies remains that is being sold privately. The book may be ordered from: **Wildlife Health Services, P.O. Box 153, Wellingborough, Northants NN8 2ZA, UK, e-mail: NGAGI@compuserve.com** (first class delivery in UK = £22.50, airmail to Europe = £25, airmail to other continents = £35 or \$US 55, surface mail to other continents = £25 or \$US 40).

ON-LINE RESOURCES

GYRFALCON STATUS REVIEW The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) web site (<http://www.wcmc.org.uk/CITES/eng/cop/11/propose/index.shtml>) contains a status review of the Gyr Falcon, prepared as part of a proposal to amend the CITES status of North American Gyr Falcon populations (i.e., transfer North American Gyr Falcon populations from Appendix I to Appendix II, with a zero quota for export of wild birds). The review is posted on the CITES web site as a Portable Document Format (PDF) file; to view, navigate, and print PDF files, you must download and install Adobe Acrobat Reader from Adobe's web site (<http://www.adobe.com/prodindex/acrobat/readstep.html>).

NEW URL FOR RRF'S HOME PAGE The URL for the Raptor Research Foundation home page has changed to: <http://biology.boisestate.edu/raptor>. Send information for inclusions or changes in the site to Carl Marti at cmarti@micron.net.

NORTHERN GOSHAWK ON LINE The URL for Mike Shipman's on-line summary of results from his thesis research has changed to <http://www.blueplanetphotography.com/feature/gost.htm>. My project concerned the post-fledging movements and habitat use of goshawks in northeastern Nevada. The information is presented for a wide audience, with text and photos. This site has become the most-visited location on the world-wide web for information

concerning the Northern Goshawk. I encourage other graduate students and researchers to make their research available on the web. E-mail man@blueplanetphotography.com for more detail.

RAPTOR BANDING FORUM Biologists and students who use banding as a tool in raptor research are encouraged to take advantage of a new internet-based, interactive forum on raptor banding. A wide variety of topic lines allows review of many subjects including resources available to banders, opportunities to publicize banding projects to promote resightings, trap making, and ethical issues. Go to the general Bird Banding Discussion Forum at www.qty.com and search for the Raptor subtopic heading. For more information, contact: Stan Moore, P.O. Box 341, San Geronimo, CA 94963, phone: 415-662-2617, e-mail: hawkman11@hotmail.com.

VULTURE POPULATION CRASH A report to the U.S. Fish and Wildlife Service, Office of International Affairs by Robert W. Risebrough outlines dramatic, recent population declines of the White-backed Vulture (*Gyps bengalensis*) and Long-billed Vulture (*Gyps indicus*) in India, and hypothesizes that the probable cause is a new disease factor that has only recently appeared in the vulture populations. The report may be viewed at <http://worldtwitch.virtualave.net/vulture.htm>. An account of the population declines of the two species in Keoladeo National Park is in the current issue of the *Journal of the Bombay Natural History Society*, which has not yet arrived in North America (Prakash, V. 1999. Status of vultures in Keoladeo National Park, Bharatpur, Rajasthan with special reference to the population crash in Gyps species. *J. Bombay Nat. Hist. Soc.* in press). Persons interested in wildlife diseases will find a comprehensive and fascinating review of emerging diseases in wildlife, and how they may "jump" from one species to another in a recent issue of *Science* (Daszak, P., A. A. Cunningham and A.D. Hyatt. 2000. Emerging infectious diseases of wildlife - threats to biodiversity and human health. *Science* 287:443-449). Bob Risebrough's e-mail address is pelecanus@igc.org.

"VULTURE VIEWS" is a "flexible 2 weekly user group e-mail" managed by the Vulture Study Group. Launched in October 1999, this e-mailed newsletter features a variety of current information and commentary on vulture biology and conservation. Those who would like to receive "Vulture Views" or contribute material may contact the page administrator, Brenda Daly, at rcgvsg@global.co.za.

NEWS OF MEMBERS

Christensen Designs changed its name and place of business early this year. The company, which specializes in wildlife research video equipment, is now known as Sandpiper Technologies, Inc. Proprietors **Ann & John Christensen** purchased a building at 535 Yosemite Avenue W, Manteca, CA 95337 in late 1999. They have completed the move and can be reached at: 209-239-7460 (phone), 209-239-1571 (fax), ann@peeperpeople.com (e-mail), or <http://www.peeperpeople.com> (web).

RRF Director **Miguel Ferrer** has a new e-mail address: mferrer@ebd.csic.es.

RRF Treasurer **Jim Fitzpatrick** has a new e-mail address: jim@carpenternaturecenter.org.

Richard Fyfe, formerly of the Canadian Wildlife Service, has been named to the Order of Canada in recognition of his contribution to the recovery of the anatum Peregrine Falcon in North America and his service to raptor conservation worldwide. The Order of Canada is awarded by the Governor General of Canada each year and is the centerpiece of Canada's system of honors; individuals are named to the order in recognition of a lifetime of achievement, merit, and service to the country. During the 1960s, Richard Fyfe, along with American colleagues like Tom Cade, was instrumental in raising the alarm over the effects of organochlorine pollutants on birds, especially raptors. He spearheaded Canadian programs focused on bringing the last anatum peregrines into captivity, refining techniques for

captive breeding these falcons, and eventually reintroducing the bird over its former range. This program represents one of the more successful conservation endeavors ever undertaken in Canada. The Committee on the Status of Wildlife in Canada removed the anatum peregrine from the list of endangered species in April 1999.

Fred & Nancy Gehlbach (Baylor University) begin their 6th consecutive field season in March 2000, studying the ecological relations of a guild of small owls (Western and Whiskered screech, Flammulated, Northern Pygmy, and Elf) nesting together in the Chiricahua and Huachuca Mountains, Arizona. They are sponsored by National Geographic Society. This study began on an itinerant basis in 1955, when Fred was employed by the American Museum of Natural History to help open the Southwestern Research Station. Fred is also in his 33rd year of studying the same population of Eastern Screech Owls in central Texas and is beginning to sort out environmental and genetic factors that contribute to productivity.

Ohad Hatzofe has a new e-mail address: hatzofe@spni.org.il.

The Furzebrook Research Station no longer exists. The staff has become part of a larger grouping within the Natural Environment Research Council (UK) and has moved to a new site 10 km away. Accordingly, RRF Director **Robert Kenward**, **Kathy Hodder**, and **Sean Walls** have a new address: Centre for Ecology and Hydrology, Winfrith Technology Centre, Dorchester DT2 8ZD, UK, phone: 44-1305-213500, fax: 44-1305-213600. E-mail addresses have also changed: reke@ceh.ac.uk, khh@ceh.ac.uk (including inquiries regarding RANGES software), and ssw@ceh.ac.uk or sean@biotrack.co.uk, respectively.

RRF President **Mike Kochert** has a new e-mail address: mkochert@eagle.boisestate.edu.

RRF Director **Mike McGrady** and family have moved to Austria and have new e-mail addresses: mikejmcgrady@aol.com and mikemcgrady@hotmail.com.

REQUESTS FOR ASSISTANCE

GOLDEN EAGLES The Carolina Raptor Center has two non-releasable Golden Eagles which have produced an egg for the first time, in early March 2000. It was probably not fertile, but they will most likely try again next year. We are looking for a researcher working with Golden Eagles, either with wild nests or at a hacking project. Our hopes are to place any future youngsters with such a project. If anyone is interested, please contact: **Mathias Engelmann**, phone: 704-875-6521, ext. 108.

FOR SALE

PHOTO SALES BENEFIT OLENDORFF FOUNDATION Mike Shipman, Boise State University graduate student in Raptor Biology and photographer, is providing an artful means to contribute to the Richard R. Olendorff Foundation (Wingspan 8(2):8) and thereby assist raptor research, conservation, and education. Color prints and Polaroid transfers of nature-related and other subjects are available for sale at Mike's web site: <http://www.blueplanetphotography.com>. A significant portion of the proceeds from these sales will be donated to the Olendorff Foundation. For more information, contact: **Mike Shipman**, P.O. Box 44569, Boise, ID 83711-0569, phone: 208-327-1016, e-mail: man@blueplanetphoto.com.

RRF ITEMS Several items are available. Logo pins (\$5); decals (\$3); T-shirts from the 1995 (Duluth) and 1997 (Savannah--Swallow-tailed Kite on back) annual meetings (\$5); coffee mugs from the 1995 annual meeting (\$5); and abstract packets from all conferences except the 1996 annual meeting (\$10 each). To purchase, contact: **Jim Fitzpatrick**, 12805 St. Croix Trail S, Hastings, MN 55033, phone: 612-437-4359, fax: 612-438-2908, e-mail: jim@cncstcroix.com. Payment may be via check or credit card; prices include shipping. For T-shirts, be sure to specify size (S, M, L, XL).

RECENT THESES ON RAPTORS

Bennett, J. R. 1999. HOME RANGE AND HABITAT USE BY GREAT HORNED OWLS IN SOUTHERN CALIFORNIA. M.S. Thesis, California State Univ., Long Beach. 45pp.

Radio-telemetry data were collected on 14 Great Horned Owls (*Bubo virginianus*) in order to determine space use and habitat requirements in a fragmented landscape. Territorial owls were trapped in both urbanized and 'natural' habitats within Orange County, California and tracked for up to 17 months. Home range size (95% Adaptive Kernel) among owls was highly variable. Average home range size among males was 425 ha ($n = 9$) and among females 180 ha ($n = 5$). Great Horned Owls utilized both oak/sycamore woodland and ruderal grassland habitats disproportionately more relative to other habitat types within their home range (Freidman method). Contrary to studies of many soaring predators, home range size did not decrease with the proportion of preferred habitat within the home range. There was no correlation between home range size and any single habitat type or habitat group. The distribution and abundance of hunting perches throughout an owl's home range was not quantified, but may influence the proportion of usable habitat within the home range of "perch and wait" style predators.

Churchill, J. B. 1998. WINTER MOVEMENTS AND HABITAT USE OF NORTHERN SAW-WHET OWLS AT ASSATEAGUE ISLAND, MARYLAND. M.S. Thesis, West Virginia Univ., Morgantown. 84pp.

Ten Northern Saw-whet Owls were radio-tracked over two winters (1996 and 1997) at Assateague Island, Maryland. I used the fixed kernel method to calculate home range estimates for seven owls. Ninety-five percent home range sizes averaged 122.9 ha (range from 39.7 - 261.9 ha) but varied in size and shape. I also calculated adaptive kernel, harmonic mean, and minimum convex polygon home ranges for comparison of these methods. Habitat composition in 30% home ranges was compared with 95% home ranges, and 30% and 95% home ranges were each compared with composition of the entire study area using compositional analysis. The comparison of 95% home range with the study area was significant ($P = 0.026$). Forested habitat was significantly preferred and marsh and grassland habitats were significantly avoided. Habitat use at 54 telemetry location points was different from habitat available ($O^2 = 35.9$, $P = 0.001$, $df = 4$) with pine habitat being preferred and marsh avoided.

Roost site characteristics were measured at 30 day roosts in 3 m plots. Variables measured included number of stems < 2.5 cm DBH, number of stems > 2.5 cm DBH, roost tree height, roost tree species, canopy cover, average canopy height, average shrub height, roost DBH, distance to nearest tree, and percent ground cover. Vegetation also was measured at a random site in similar habitat. Logistic regression was used to compare use and non-use roost plots at entry level $\alpha = 0.15$ and stay level $\alpha = 0.10$. Distance to nearest tree ($P = 0.002$) and average canopy height ($P = 0.01$) were both significantly lower at use sites. Number of stems > 2.5 cm, stems < 2.5 cm and roost tree DBH were all significantly higher ($P = 0.01$, $P = 0.04$, and $P = 0.03$) at use sites. No ground cover proportions were significant.

Roosts were most often in loblolly pine forest and the more abundant myrtle swamp. High stem densities and shorter distances to nearest tree at used roost sites indicated that owls chose sites with dense cover, probably as protection from predators. Average roost height was 2.9 m (± 3.0 m SD). Average distance to trunk was 1.2 m (± 1.3 m SD). Average percent cover above the roost was 50 % (± 31 % SD) and below the roost was 24 % (± 23 % SD).

Eastham, C. P. 2000. MORPHOLOGICAL STUDIES OF TAXONOMY OF THE SAKER (*FALCO CHERRUG* - GRAY 1833) AND CLOSELY ALLIED SPECIES. Ph.D. Diss., Univ. Kent, Canterbury. 295pp.

The taxonomy of the saker (*Falco cherrug*) at the specific and subspecific level is poorly understood. In Arabic falconry the saker is held in high esteem and harvesting birds from the wild raises questions of conservation status and sustainability. In order to properly conserve the saker, its classification according to the Linnaean and Arabic system must be clarified.

To understand taxonomic relationships between the saker and closely related species morphometric measurements from a priori classified species were analysed. In addition, because phenotypic variation is often the result of differences in ecotypic adaptation, morphometric characters of presumed relevance in relation to climate, habitat, flight

performance and feeding ecology were examined.

Members of the subgenus *Hierofalco*, to which the saker belongs, separated into three main taxonomic units and ecological forms: lanners (*F. biarmicus*) and lagers (*F. jugger*), sakers and so-called "altai falcons" (*F. altaicus*), and gyrs (*F. rusticolus*). The theory that "altai falcons" are hybrids between gyrs and sakers was not supported from morphometric data. However, it is considered that due to recent speciation, which may have occurred in the Pleistocene, introgression between sakers and gyrs, and other members of the subgenus *Hierofalco*, is possible in sympatry. Members of the subgenus *Hierofalco* are described as allospecies within a superspecies, according to the Biological Species Concept.

To study geographic variation of the saker, external morphological characters from specimens of known breeding provenance were analysed. The majority of variation was individual with some geographic variation suitably described as clinal between small dorsally uniform western lowland forms and large dorsally barred eastern highland forms, with an array of contiguous intermediate forms. Due to the clinal nature of the observed geographic variation no subspecies are recognised. Eastern highland populations, especially the large dark brown and grey so-called "altai falcons" preferred by Arab falconers, are considered under greatest threat from over-trapping.

Freeman, P. L. 1999. SPECTROGRAM ANALYSIS OF VARIATION IN MALE BARRED OWL VOCALIZATIONS. M.S. Thesis, North Dakota State Univ., Fargo. 93pp.

This study investigated whether male Barred Owl (*Strix varia*) vocalizations were individually identifiable using spectrogram analysis. Owls were recorded at 17 different field locations in Itasca State Park, Minnesota, from mid-February through May. In 1997, 134 calls from 7 locations were analyzed; in 1998, 530 calls from 15 locations were analyzed. The final four notes of the Legato hoot, the most common vocalization which consisted of five-to-nine evenly accented notes, were used in the analyses. On each spectrogram, I measured 10 temporal and 12 frequency measures and used a stepwise logistic regression to select the 7 most influential variables. A discriminant function analysis (DFA) separated and identified spectrograms from different locations in 1998 with an overall accuracy of 84.5%, which showed that spectrogram classification was possible. Re-substitution accuracy of 1997 spectrograms into the 1998 DFA was 49.1%. Sortspects, a multimedia-based program, was developed and used to determine whether observers could discriminate unmeasured calls using only concurrent visual and auditory cues. Discrimination of 1997 spectrograms (four locations) was 100% for all four observers. In 1998, the observers were able to correctly discriminate spectrograms (15 locations) 38, 58, 76, and 87% of the time. The ability to match spectrograms between years was 50-75% successful.

WINGSPAN CONTENT GUIDELINES

As *Wingspan* enters its ninth year, and the number of contributions to RRF's newsletter continues to rise, it is appropriate to reflect on what types of contribution are (and aren't) appropriate for *Wingspan*. *Wingspan* was established in 1992 as "a newsletter designed to provide timely information to members of the Raptor Research Foundation." It is intended to complement, not overlap, *The Journal of Raptor Research*, and it is not a semi-popular vehicle such as *The Eys*, formerly published by the National Wildlife Federation. RRF's intent for *Wingspan* has been honed over the past eight years as the *Wingspan* editors have confronted a wide array of potential content and have sought guidance from the RRF Board. Through this iterative process, the following guidelines have emerged.

Appropriate for *Wingspan*

Leadership Communications.--communications to the RRF Membership from RRF Officers, Directors, and Committees; also, letters written by RRF to other organizations.

Commentary.--Although open letters have seldom appeared, *Wingspan* welcomes commentary regarding RRF as an organization as well as raptor biology and conservation.

Conservation News.--updates on recent conservation events and activities. Such accounts should not report results of investigations, although the scientific basis of a problem, action, or decision may be summarily described (e.g., a decision to list a raptor species as endangered based on population declines).

Organization Profiles.--sketches of established organizations whose purpose substantially concerns raptors.

Meeting Reports--summary descriptions of recent conferences, symposia, and workshops concerning raptors. Such accounts may note the titles/authors of papers presented at the event--if the number of papers is small--but should not report findings (results) of these papers.

RRF Resolutions--draft resolutions before the RRF Membership; also, final resolutions once they have been adopted.

Thesis Abstracts--pending discussion by the RRF Board, abstracts of theses or dissertations on raptors published during the current or preceding two calendar years. Abstracts should be accompanied by a complete citation (author's full name, year, title, university, city in which the university is located, and number of pages).

Announcements--descriptions of upcoming events, job openings, recent publications, audio/visual resources, and on-line resources concerning raptors; also, assistance offered and sought by persons working with raptors, and personal property (related to raptors) offered for sale by members.

Grants & Awards--announcements of grants and awards available exclusively to persons working with birds of prey; also, announcements of grant and award recipients whose grant/award is based on work with raptors.

News of Members--news of RRF members, including obituaries and contact information updates; news should not include results of members' investigations.

RRF Elections--solicitations urging RRF members to run for office; also, results of RRF elections.

RRF Business--any other matters pertaining to RRF as an organization,

Not Appropriate for *Wingspan*

Results--*Wingspan* does not publish results from research, monitoring, inventories, surveys, management experiments, expeditions, or other types of investigation (with the sole exception of thesis abstracts). These types of reports must undergo peer review and are appropriately directed to *The Journal of Raptor Research* or another scientific publication.

TJRR Communications--Communications concerning content published in *The Journal of Raptor Research* should be directed to RRF's Editor-in-Chief.

Book Reviews--Critique/comments regarding the content or merits of a recent publication should be directed to RRF's Book Reviews Editor. Book reviews are featured in *The Journal of Raptor Research*.

Advertisements--*Wingspan* does not publish advertisements for commercial enterprises.

General Ornithology--*Wingspan* publishes only material that is specific to raptors. Contributions concerning birds in general should be directed to the Editor of *Ornithological Newsletter*.



WINGSPAN
1640 Oriole Lane NW
Olympia, WA 98502-4342 USA

Non-profit Organ.
U.S.
POSTAGE
PAID
Olympia, WA
Permit No. 78